



Soundshake '98

Earthquake Drill

We live on the Ring of Fire where earthquakes are inevitable. In fact, we have hundreds of them in Washington State every year. But they are usually so small that we don't even feel them. Many large earthquakes have occurred fairly recently, however, along the Aleutian Islands up in Alaska. Eventually we too are going to have a big one. The question is not, "Are we going to have a large quake?" but "When??" We need to be prepared. To practice and improve our ability to respond, on Tuesday, September 22, King County will be conducting a region wide earthquake drill. Every work group in the Department of Natural Resources will participate at some level. At minimum, we hope that every employee will at least perform a "Drop, Cover, and Hold" drill.

Why You Should Practice "Drop, Cover and Hold"

In most situations **drop, cover and hold** is the best course of action. But why actually crawl under a table or your desk (provided it isn't so full of junk that you can't even get under there)? Reading about it just isn't enough. You need to practice it, actually do it. An old Chinese Proverb explains why:

I hear and I forget,

I see and I remember,

I do and I understand.

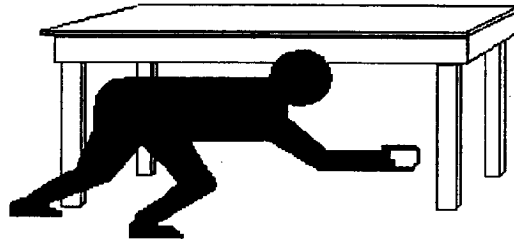
By embarrassing yourself and getting down on your hands and knees and by crawling under your desk, you greatly increase your chances of remembering what you are supposed to do when the ground really does shake. Your body will remember. Your mind, in all probability, will be dealing with the fight or flight response. Participating in a whole-body drill turns it into a kinesthetic (reflex) memory that does not depend on the panicking mind to act.

What to Expect During A Large Earthquake:

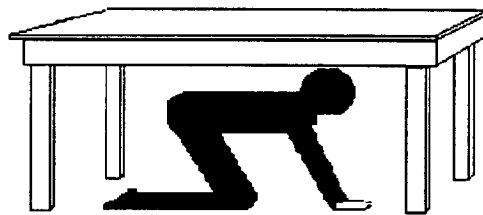
- Earthquakes strike suddenly, violently and without a lot of warning.
- There will be a roar like the Blue Angels and a jolt followed by shrieks and screams.
- Everything will begin to move, shake and rumble.

- The lights will be flickering or go out altogether.
- Dust will be flying and windows will shatter.
- Unsecured books and objects will be flying off the shelf; file cabinets will be walking around the room or turning over; your computer terminal will be bouncing around on your desk.

What to do:



Drop – before you fall down. Get your head below the level of the furniture.



Drop and Cover – if possible crawl under your desk or a table. This is to keep you from being beamed with a book or a binder, or worse yet falling ceiling tiles, light fixtures, heating and air conditioning ducts, or file cabinets.



Drop, Cover and Hold - on to the desk or table, this is to keep your desk from jumping up and down on your fingers or walking off on its own, leaving you exposed.

No Desk? Drop and Cover



If you can't find anything to get under **cover your head** and face with your arms. It is better to have a gash on your arm than on your face.

Wait it out until the shaking stops.

take a couple of deep breaths, and then crawl out to see how the world has changed.

If you are Indoors:



Drop, cover and hold. Do not try to run outside.

If you are not near a desk or table, drop to the floor against an interior wall and protect your head and neck with your arms. Avoid exterior walls, windows, hanging objects, mirrors and tall furniture. Contrary to popular belief, don't stand in a doorway. They aren't necessarily any stronger than any other wall, and you run the risk of having the door bang you on the head or smash your fingers. Because of falling debris, the most dangerous thing you can do is try and run outside while the ground is still shaking.



In a high-rise:

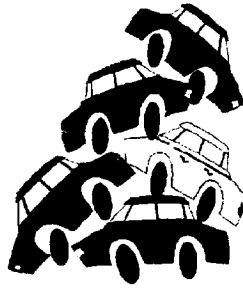
Drop, cover and hold. Avoid windows and other hazards. Do not use elevators or the stairs during the quake. If you are on an elevator, hit all the floor buttons and try to get off as quickly as possible. Do not be surprised if sprinkler systems or fire alarms activate. After the quake, be very wary of stairs, which may have been weakened by the shaking. Do not use an elevator, because the power could fail on your trip down.

On the street, downtown:

Sidewalks next to tall buildings are particularly dangerous. Windows and building facades can shower the street with deadly debris. Duck under a strong entryway or crawl under a parked vehicle (the bigger the better).

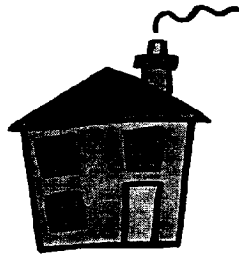
Outdoors: Move to a clear area if you can safely do so; avoid power lines, trees, signs, buildings, vehicles and other hazards.

In a car driving:



Slowly pull over to the side of the road. Don't slam on the brakes. Stop, and set the parking brake. Avoid overpasses, bridges, the viaduct, trees, power lines, signs, skyscrapers and other hazards. Stay inside the vehicle until the shaking is over. Expect to see broken water mains and fires from natural gas lines. Power lines will probably be strewn through the streets and roads. They are very dangerous. If a power line falls on the car, stay inside until a trained person removes the wire.

At Home:



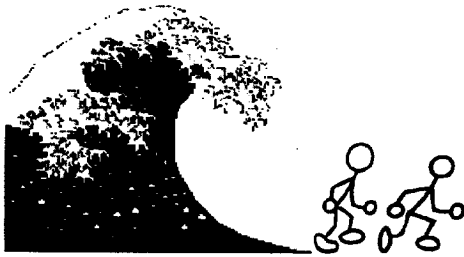
In a kitchen: Get out if you can. This is one of the most dangerous places in your house. Get away from the stove, refrigerator and cabinets with heavy objects. If you can't get out, crawl under the table. Drop, cover and hold.

In bed: Ride it out. Cover your head with your pillow and be thankful if you don't have unsecured pictures hanging over your bed. If you have a mirror on the ceiling over your bed, you are in big trouble. Keep a pair of slippers or shoes and a flashlight next to the bed. Put them on as soon as the shaking stops. The most common injury treated in an emergency room after a quake is cut feet.

In a stadium or theater: Stay at your seat. Get down on the floor and protect your head and neck with your arms. Don't try to leave until the shaking is over. Then walk out, slowly watching for anything that could fall in the aftershocks.

In a mall: Move away from display shelves and windows. Look for sturdy furniture or an interior wall. Drop, cover and hold.

On the waterfront or large water body:



Drop, cover and hold. As soon as the shaking stops, head for higher ground. On the ocean earthquakes can create tsunamis or large waves 10-100 feet high that can come ashore and destroy everything left standing. Recent research has revealed that tsunamis can and do occur in the Puget Sound and on Lake Washington and can create waves 21-feet or higher. Evidence that one is coming is a sudden drop in the water level. But by then it is too late. Do not wait. Immediately run for higher ground.

After the Quake:

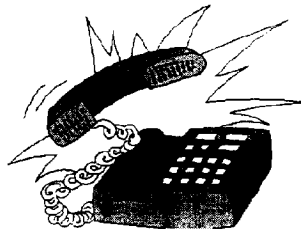
- Check yourself and others for injuries. Administer first aid quickly and carefully.
- Be prepared for aftershocks. Aftershocks occur in the first minutes, hours or days after the initial shake.
- Check the building you are in for structural damage and other hazards such as exposed electrical lines, gas leaks, chemical and flammable liquid spills.



- If you have to evacuate the building, take your emergency supplies, your coat, umbrella, flashlight, walking shoes, portable radio, cellphone. Once you evacuate, you may not be able to return.



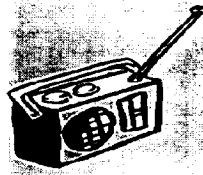
- Plan to stay where you are for at least 5-6 hours.
- Put telephones back on the hook. Use the phone only to report life-threatening emergencies.



- Do not use elevators. The power may fail on your trip down. Beware of structural damage to

stairs.

- Listen to the radio (KIRO-AM 710) for information and instructions. Store extra batteries.

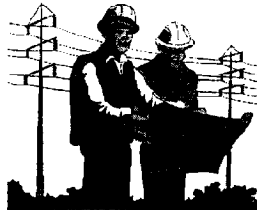


- At home turn off the water and electricity (individual breakers first, then the master breaker). Turn off the gas only if you hear hissing or smell a gas leak. Bury a wrench in the soil or bark under the gas meter so it will be handy. If you turn it off unnecessarily then the gas company must come out and turn it back on.

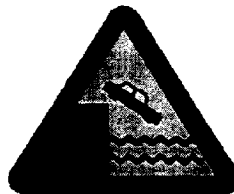
What to Expect After a Large Earthquake:

Depending on the severity of the quake, your world could have changed drastically. If it was a major quake, you will probably find the following:

- You will be on your own.
- Police, fire and paramedics will be overwhelmed.
- The power will be off and may stay off for days to weeks.



- Telephones (landlines and cell phones) will not work. Service may take hours to days to restore.
- Roads will very quickly gridlock. Some bridges, overpasses, and freeways will collapse or at the very least need to be inspected. Mud and landslides will occur. Be prepared to stay where you are for up to 72-hours.

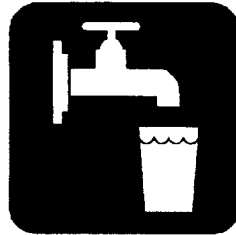


- Water lines will break and there will be no tap water for days to weeks. Drinking water will be a most precious commodity.
- Grocery stores will quickly sellout. Because of transportation disruptions, it may days to weeks before they are restocked. For some people, next to water, coffee will become the second-most-precious commodity.
- Because there is no electricity or phone service, price scanners and ATM cards will not work.

Gasoline will be unavailable. Money will be in short supply.

Be Prepared, Plan ahead and Store these items:

1. Water May Be Your Most Precious Resource:



- Store one gallon per day per person for at least 72-hrs. (Some people store a weeks supply)
Don't forget your pets.
- The first rule after the quake is to conserve water. Use water only for drinking, washing hands, cooking and first aid
- Purify water by:
 - > **Boiling** for at least two minutes,
 - > **Filtering with a backpacking filter** (not a Brita or tapwater filter), or
 - > **Treat with bleach.** Use regular (unscented) household bleach. Add 15 drops of bleach to each gallon of water, stir and let stand for 30-minutes. If it does not taste slightly like chlorine add 15 more drops and wait thirty more minutes.



Danger: don't put in too much and don't use fancy scented bleaches.

2. Food: Your Second Most Important Resource



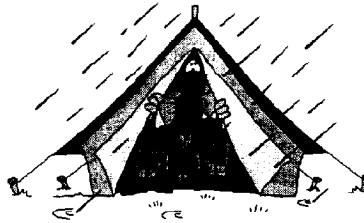
- Store food for at least 72-hours.
- Food that is packaged or canned and requires no cooking is best.
- Can opener (non-electric).
- Don't forget food for pets.
- If possible eat the food in the refrigerator first.
- Don't open the freezer until the second or third day

Miscellaneous Emergency Supplies:

- First aid kit



- ABC fire extinguisher
- Cooking equipment, camp stoves, fuel, pots and pans.
- Picnic supplies: paper plates, cups, plastic utensils to save water, paper towels



- Shelter: tent, tarps, plastic sheeting
- Blankets, sleeping bags
- Potable radio with extra batteries
- Flashlight with extra batteries, candles
- Large plastic bags
- Duct tape
- Sanitation supplies, plastic bags to line the toilet, waterless hand soap, toilet paper, feminine and infant supplies
- Essential medicines and glasses
- Cash (the banks will be closed and credit cards will not work). Consider storing barter items, such as candles, coffee, batteries, flashlights, cheap radios, etc.

Additional Information Resources

For more information on earthquake preparedness there is are many excellent Internet sites:

"Putting Down Roots in Earthquake Country" - <http://www.scecdc.scec.org/eqcountry.html>

Epicenter - Emergency Preparedness Center - <http://theepicenter.com/chklist.html>

King County Office of Emergency Management - <http://www.metrokc.gov/emergncy/quake.htm>

Tips for Preparing Children for Earthquakes - <http://www.ak-prepared.com/children.html>

Prepare Now for an Earthquake: http://hoshi.cic.sfu.ca/~pep/Prepare_Now/prepare.html

Washington State Earthquake Info from the University of Washington-
<http://www.geophys.washington.edu/SEIS/PNSN/localeq.html>

<http://aqua/safety/EarthquakePrep/earthquake.html>

9/22/98

Depressed after reading this?

Thinking about disasters may seem morbid and depressing, but being prepared at work and home and knowing what to do if the ground shakes can greatly reduce the chances that you or a member of your family will be injured. It will also significantly reduce the trauma that can occur in the aftermath of a disaster. Much of what is discussed above is a worse case scenario. In fact, in all probability, things won't be nearly that bad, but wouldn't you sleep better at night knowing that you were prepared.

If you haven't prepared for a disaster at home or work, and you don't plan to, ask yourself, "Why not?" Maybe its **Disaster Preparedness Denial**? Click here for more information:
<http://aqua/safety/DisasterDenial/Denial.html>

Adopt the motto of the Boy Scouts.....*Be Prepared*

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KING COUNTY
Department of Natural Resources

Emergency Management Committee